

## **Supplementary Figure Legends**

**Supplementary Figure 1** – Purified Ino80 core and SC2 complexes.

**Supplementary Figure 2** – Raw data for MST measurements of Ino80 subunit deletion complexes.

**Supplementary Figure 3** – Kinetic data for stimulated and unstimulated ATPase activity of Ino80 subunit deletion complexes.

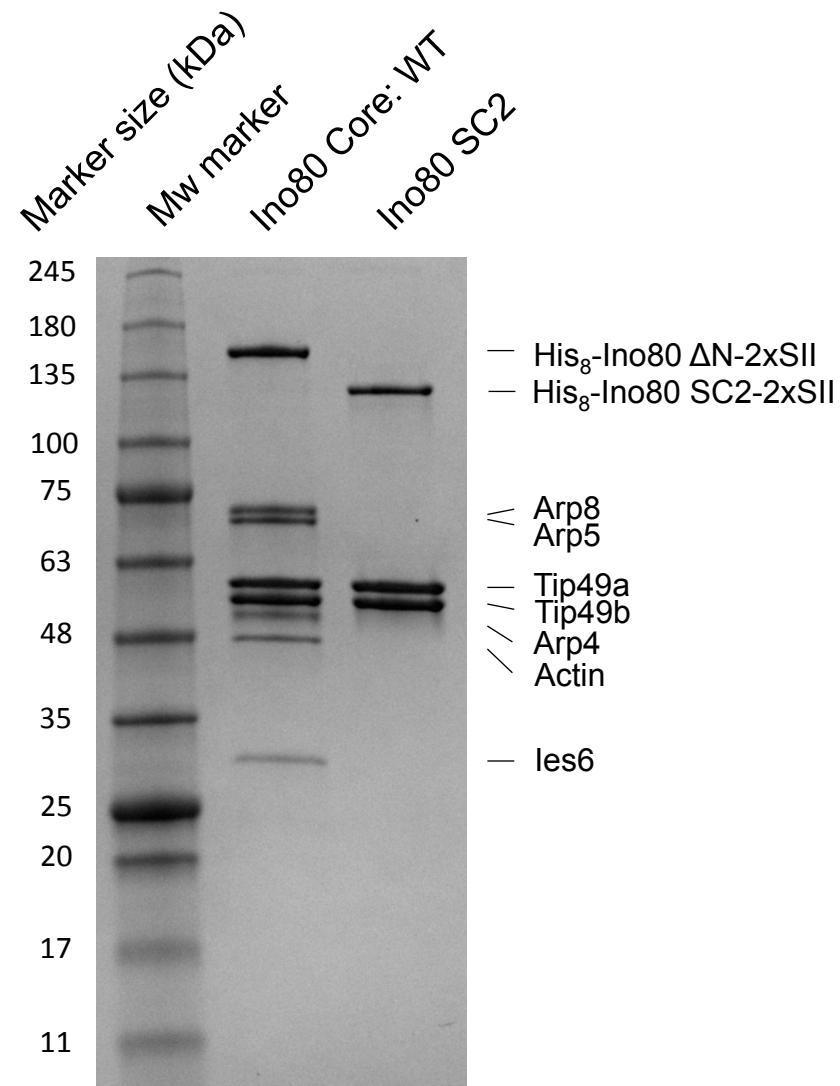
**Supplementary Figure 4** –ATPase activity in the presence of saturating H2A nucleosome.

**Supplementary Figure 5** – Kinetic data for Ino80 ATPase activity over a range of ATP and IP<sub>6</sub> concentrations.

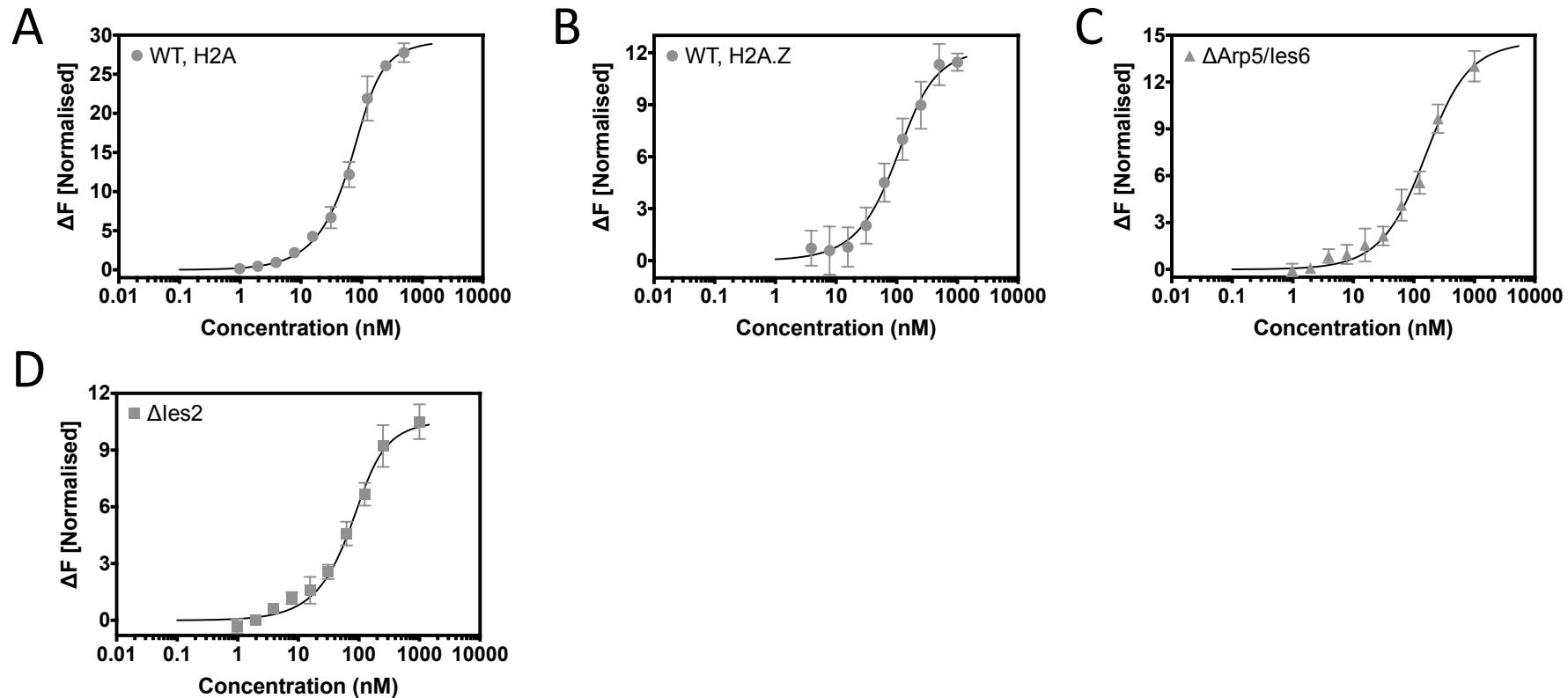
**Supplementary Figure 6** – Kinetic data for Ino80 ATPase activity over a range of nucleosome and IP<sub>6</sub> concentrations.

**Supplementary Figure 7** – Raw MST data of nucleosome biding in the presence of ligands. These experiments were conducted in the presence of 5 mM MgCl<sub>2</sub>.

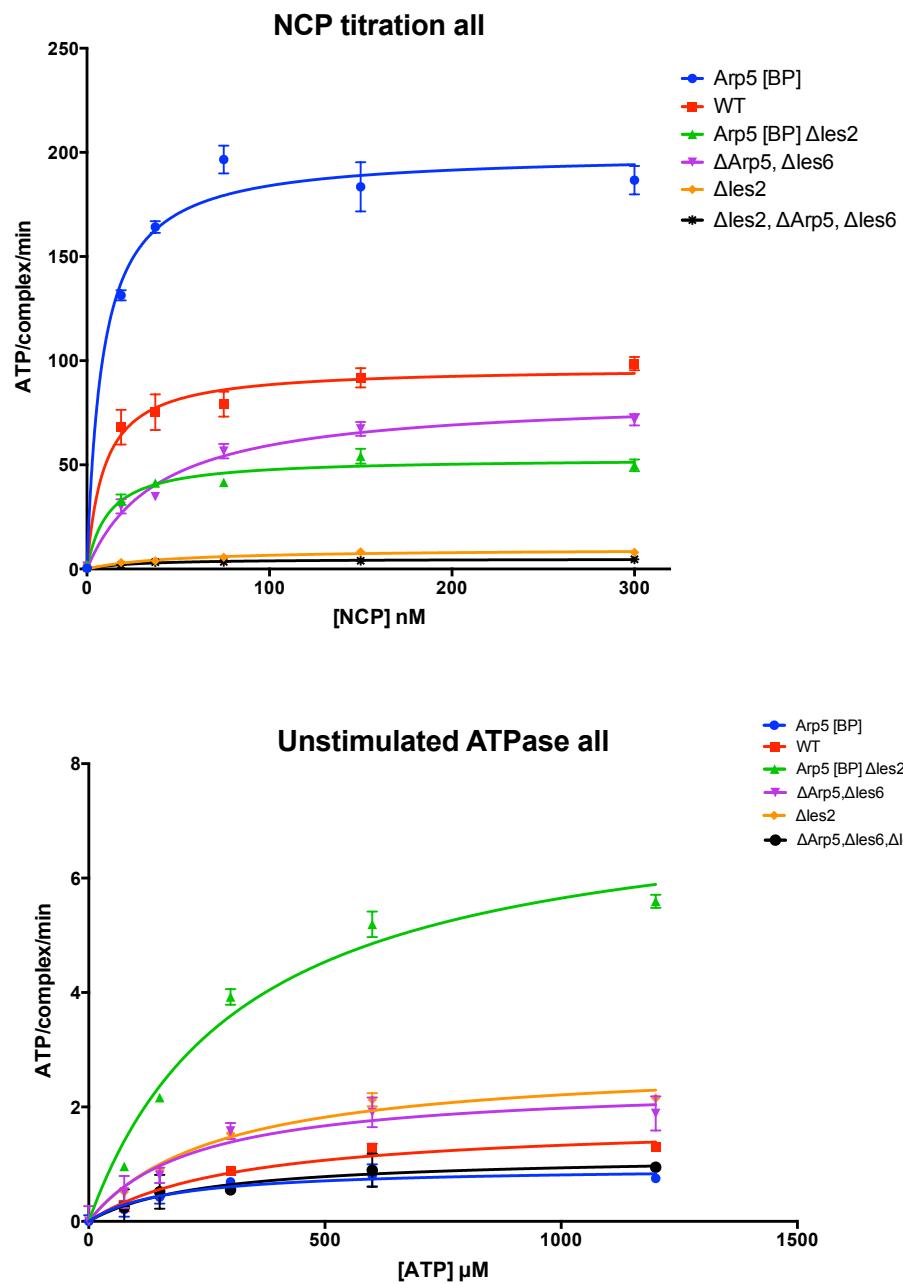
Supplementary Figure 1



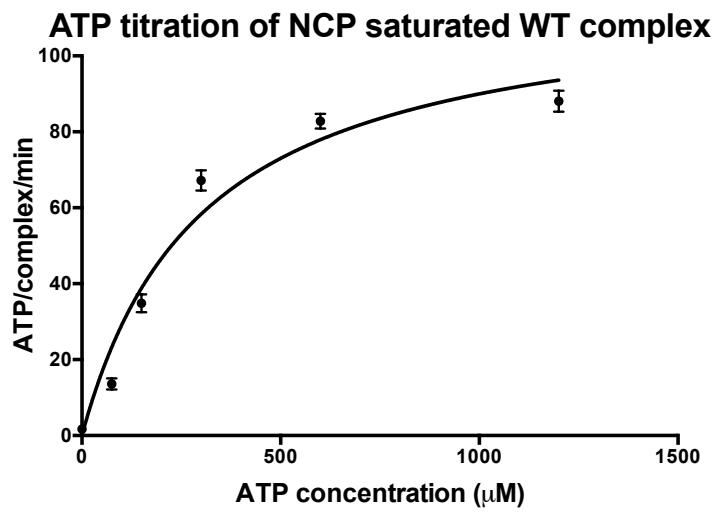
Supplementary Figure 2



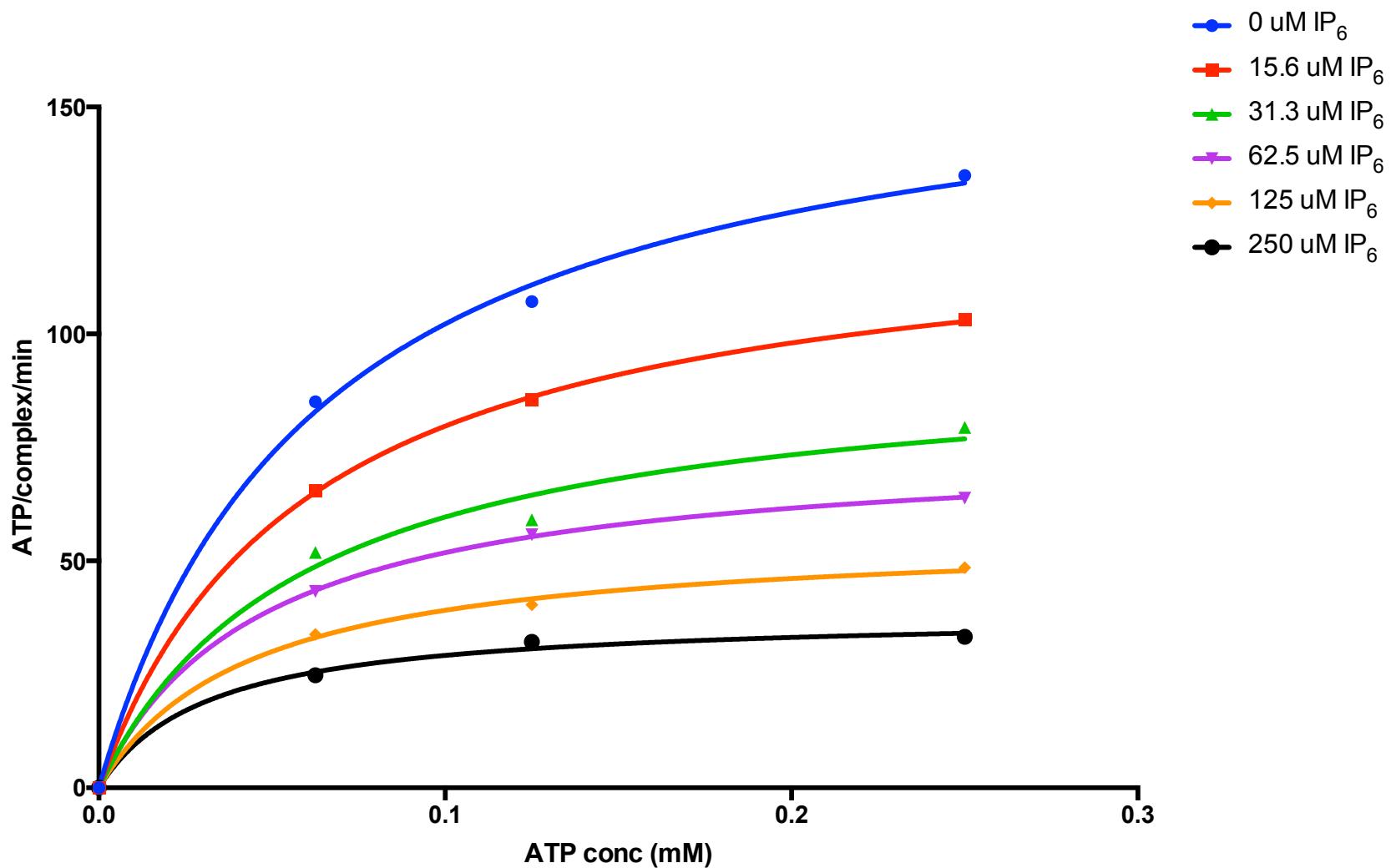
Supplementary Figure 3



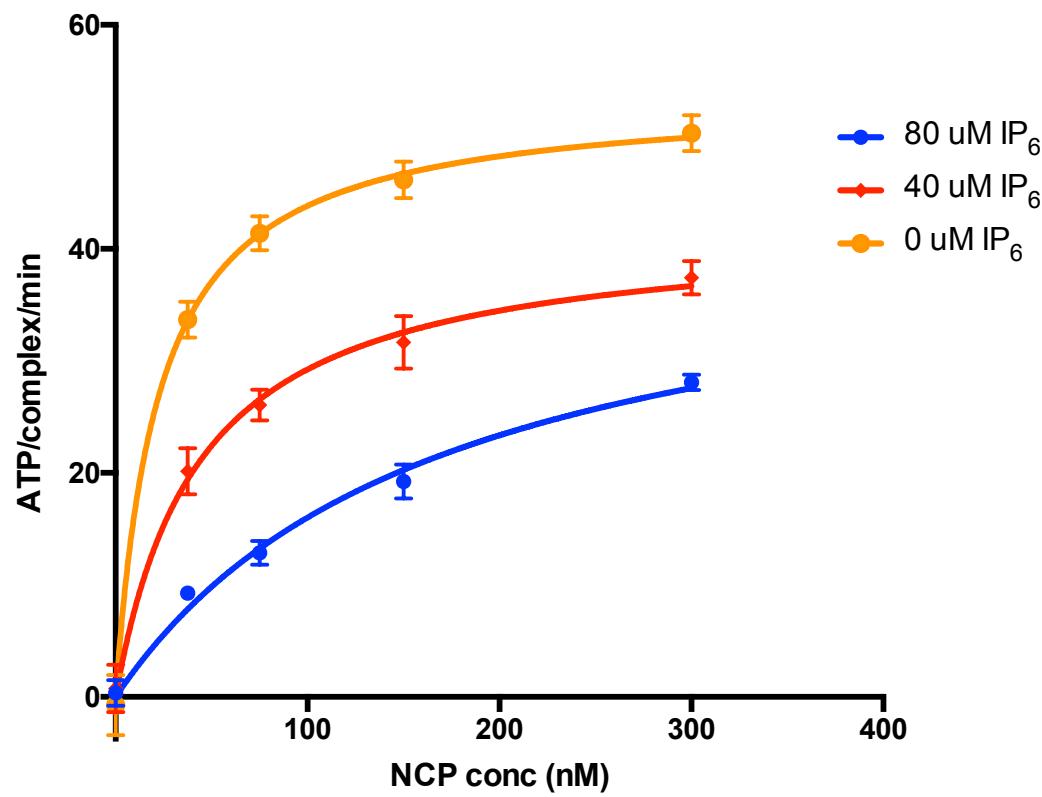
Supplementary Figure 4



Supplementary Figure 5

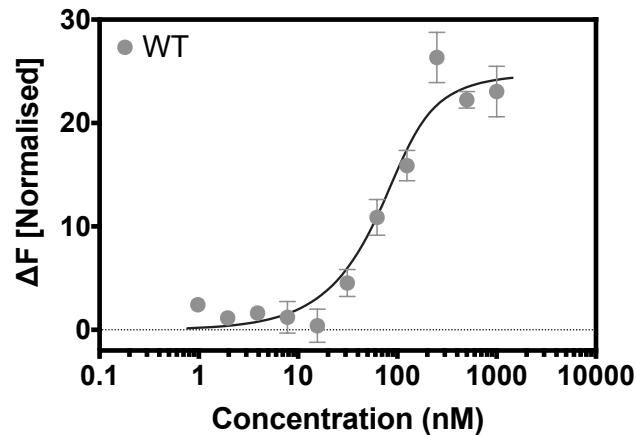


Supplementary Figure 6



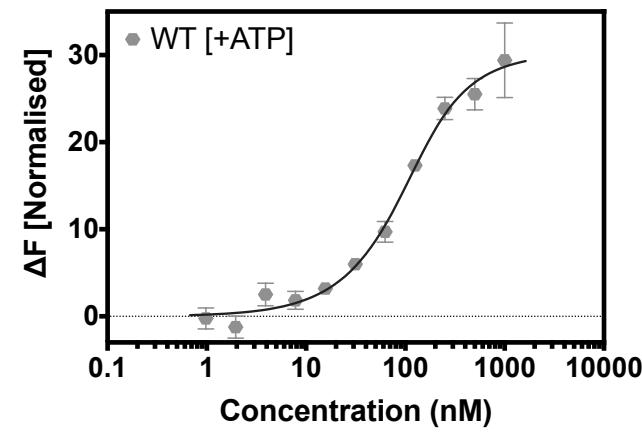
## Supplementary Figure 7

Nucleosome = Human H2A-NCP, 100 bp overhang, **H3<sup>AF647</sup>**



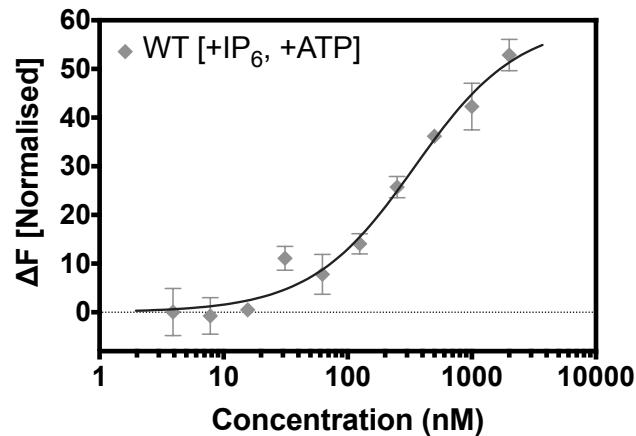
$$K_d = 22.9 \pm 2.1 \text{ nM}$$

Nucleosome = Human H2A-NCP, 100 bp overhang, **H3<sup>AF647</sup>**



$$K_d = 53.3 \pm 2.4 \text{ nM}$$

Nucleosome = Human H2A-NCP, 100 bp overhang, **H3<sup>AF647</sup>**



$$K_d = 321.0 \pm 25.4 \text{ nM}$$